

IN THE CLAIMS

Please cancel Claims 17-19, 21, 23-28, 48, 52, 53, 55, 56 and 59. Please add new Claims 60- 65.
Please amend the remaining claims as follows:

1. (Currently Amended) A videophone system, comprising:

a cable television system headend, the cable television system headend is operative to control the routing of videophone calls within a cable television system;

a plurality of subscriber terminals connected to said headend via a first transmission medium, said subscriber terminals being adapted to ~~transmit and~~ receive a cable television signal over said first transmission medium, said cable television signal including compressed digitized videophone ~~data~~ signals and compressed digitized television signals corresponding to respective television programs non-videophone data, said subscriber terminals being adapted to:

identify, select, ~~transmit,~~ and receive said compressed digitized videophone signals ~~data~~ and said compressed digitized television signals,

transmit compressed digitized videophone signals over the first transmission medium, and

provide at least one viewer with at least a portion of television pictures corresponding to said compressed digitized television signals;

a first videophone terminal external to and ~~unit~~-operationally connected to a first one of said subscriber terminals via a second transmission medium that is different from said first transmission medium, said first videophone terminal ~~unit~~ being adapted to receive a first compressed digitized videophone signal from ~~exchange said videophone data with~~ said first subscriber terminal over said second transmission medium, said first videophone terminal being further adapted to produce and transmit a second compressed digitized videophone signal to the first subscriber terminal over the second transmission medium;

a camera associated with said first videophone terminal ~~unit~~, said camera providing being adapted to capture-video images to said first videophone terminal, the first videophone terminal being adapted to produce said second compressed digitized videophone signal from said video images ~~for transmission to said videophone unit~~; and

at least one display device associated with said first videophone terminal ~~unit~~, said display device ~~receiving and~~ displaying at least a portion of a decompressed video signal corresponding to said first compressed digitized videophone signal ~~a video portion of said videophone data~~.

2. (Currently Amended) The videophone system of Claim 1, wherein said first transmission medium comprises hybrid fiber coax.

3. (Currently Amended) The videophone system of Claim 1, wherein said camera is a digital video camera providing the video images in digital form to the first videophone terminal.

Claims 4-9. Canceled.

10. (Currently Amended). The videophone system of Claim ~~62, 1,~~ wherein said first videophone terminal is further adapted to receive a signal from a remote control unit responsive to providing the notification, said signal from said remote control unit corresponding to input from a user, said input from the user corresponding to an acceptance or declination of the incoming videophone call ~~further comprising a graphical user interface operable via a remote control for enabling a user of said videophone system to place and receive videophone calls.~~

11. (Currently Amended) The videophone system of Claim 1, wherein said headend is coupled to a remote network via a third transmission medium ~~high-speed network~~ to enable said compressed digitized videophone signals data to be transported between the headend and users in said videophone system and users in said remote network.

12. (Currently Amended) The videophone system of Claim 1, wherein a plurality of videophone terminals ~~units~~ are operationally connected to said first ~~one~~ subscriber terminal via said second transmission medium.

13. (Currently Amended) The videophone system of Claim 1, wherein the second transmission medium providing the connection between the first videophone terminal and the first subscriber terminal comprises a communication channel from the group: Ethernet, ~~wireless Ethernet~~, firewire, and a universal serial bus ~~PCI and PCMCIA.~~

14. (Currently Amended) The videophone system of Claim ~~1 12,~~ wherein ~~said plurality of {videophones} videophone units are connected to said subscriber terminal via~~ said second transmission medium is a local area network.

Claim 15. Canceled.

16. (Currently Amended). The videophone system of Claim 1, wherein said headend is adapted to ~~convert said~~ receive said second compressed digitized videophone signal data from said first videophone terminal in a first format over said first transmission medium and convert said second compressed digitized videophone signal from said first format to a second format, said headend further adapted to transmit said second compressed digitized videophone signal in said second format to a second videophone terminal wherein said second format is different from said first format of a transmitting videophone unit to a second format corresponding to a receiving videophone unit, wherein said ~~transmitting videophone unit transmits said videophone data in a format different from said receiving videophone unit.~~

Claim 17-36. Canceled

37. (Currently Amended) A videophone system, comprising:
a cable television system headend, the cable television system headend is operative to control the routing of videophone calls within a cable television system;
a plurality of set-top terminals connected to said headend via a first transmission medium, said set-top terminals being adapted to ~~transmit and~~ receive a cable television signal over said first transmission medium, said cable television signal including compressed digitized videophone signals data and compressed digitized television signals corresponding to respective television programs non-
~~videophone data~~, said set-top terminal being adapted to:
identify, select, ~~transmit,~~ and receive said compressed digitized videophone signals data and said compressed digitized television signals non-
transmit compressed digitized videophone signals over said first transmission medium,
output to a first television at least a portion of television pictures corresponding to the
decompressed form of said compressed digitized television signals, and
output to the first television at least a portion of the decompressed form of said
compressed digitized videophone signals;
a first videophone unit operationally connected to ~~one of~~ said first set-top terminals, said videophone unit being adapted to: ~~exchange said videophone data with said set top terminal;~~
receive a first compressed digitized videophone signal received by said first set-

top terminal over said first transmission medium,
provide at least a portion of the first compressed digitized videophone signal in
decompressed form, the first set-top terminal being adapted to output
to the first television at least a portion of the decompressed form of the
first compressed digitized videophone signal, and
produce a second compressed digitized videophone signal, the first set-top
terminal being adapted to transmit the second compressed digitized
videophone signal produced by the first videophone unit over the first
transmission medium; and

a camera associated with said videophone unit, said camera providing video images to the
first videophone terminal, the first videophone unit being adapted to produce the second compressed
digitized videophone signal from said video images ~~being adapted to capture video images for~~
~~transmission to said videophone unit; and~~
~~at least one display device associated with said videophone unit.~~

38. (Currently Amended) The videophone system of Claim 37, wherein the output of the first set-
top terminal to the first television is over a second transmission medium, and wherein said camera
provides the video images to the first videophone unit over a third transmission medium different
from said second transmission medium. ~~said non-videophone data includes at least one of analog~~
~~video, analog audio, digital video, digital audio, MPEG formatted data, IP formatted data, control~~
~~information, and software download information.~~

39. (Currently Amended) The videophone system of Claim 37, wherein said videophone unit
resides internal to the first set-top terminal and is operationally connected to the first set-top terminal
by at least one electrical interface. ~~is operationally connected to one of said set top terminals by an~~
~~interface, said interface being selected from the group comprising: Ethernet, wireless Ethernet,~~
~~firewire, universal serial bus, PCI, and PCMCIA.~~

40. (Currently Amended) The videophone system of Claim 37, wherein a second videophone unit
is operationally connected to the first said set-top terminal via a second transmission medium. ~~a~~
~~plurality of videophone units is connected to one of said set top terminals.~~

41. (Currently Amended) In a cable television system including a cable television system headend, the cable television system headend is operative to control the routing of videophone calls within the cable television system, a videophone system comprising:

a cable modem terminal connected to said headend via a first transmission medium, said cable modem being adapted to transmit and receive packetized digital data over said first transmission medium, said packetized data including compressed digitized videophone signals electronically addressed to at least one videophone unit and digitized data for display different than said compressed digitized videophone signals data and non-videophone data, said cable modem terminal being adapted to identify, select, transmit, and receive said compressed digitized videophone signals data and said non-videophone digitized data for display;

the at least one a-videophone unit operationally connected to said cable modem terminal via a second transmission medium different than the first transmission medium, said videophone unit being adapted to exchange said compressed digitized videophone signals data with said cable modem terminal over said second transmission medium;

a camera associated with said videophone unit, said camera ~~being adapted to capture~~ providing video images to the at least one video phone unit for producing a corresponding compressed digitized videophone signal by the at least one for transmission to said videophone unit; and

a first at least one display device associated with said at least one said videophone unit for displaying at least a portion of the decompressed form of said compressed digitized videophone signals; and

a second display device for displaying at least a portion of a first digitized data for display received by said cable modem terminal over said first transmission medium.

42. (Currently Amended) The videophone system of Claim 41, wherein said digitized data for display ~~non-videophone data~~ includes at least one of digital video, ~~digital audio~~, MPEG formatted data, and IP formatted data, ~~control information, and software download information.~~

43. (Currently Amended) The videophone system of Claim 41, wherein the second transmission medium providing the connection between the at least one videophone unit and the cable modem device comprises a communication channel from the group: Ethernet, firewire, and a universal serial bus ~~said videophone unit is operationally connected to said cable modem by an interface, said interface being selected from the group comprising: Ethernet, wireless Ethernet, firewire, universal serial bus, PCI and PCMCIA.~~

44. The videophone system of Claim 41, wherein a plurality of videophone units are connected to said cable modem.

45. (Currently Amended) The videophone system of Claim 41, wherein the second transmission medium providing the connection between the at least one videophone terminal and the cable modem device comprises a wireless communication channel. ~~44, wherein said plurality of videophone units are connected to said cable modem via a local area network.~~

46. (Currently Amended) In a cable television system including a headend, a plurality of subscriber terminals ~~a subscriber terminal~~, and a first videophone unit, a method for transporting compressed digitized videophone signals and compressed digitized television signals corresponding to respective television programs as a multiplexed data ~~within a~~ packetized cable television signal over a cable television system, comprising the steps of:

transmitting a first compressed digitized videophone signal ~~outgoing videophone data~~ from said first videophone unit to a first ~~said~~ subscriber terminal over a second transmission medium, said second transmission medium operationally connecting the first videophone unit to the first subscriber terminal,

~~encoding said outgoing videophone data in said subscriber terminal and combining said encoded outgoing videophone data with said cable television signal;~~

transmitting the first compressed digitized videophone signal ~~said cable television signal~~ from said the first subscriber terminal to said headend over a first transmission medium different than the second transmission medium;

at said headend receiving, and processing ~~and routing said cable television signal~~ the first compressed digitized videophone signal based on packet identification, ~~wherein said outgoing videophone data is routed to a second videophone unit;~~

transmitting the first compressed digitized videophone signal from the headend to a second electronic address that is different than the electronic address corresponding to the first subscriber terminal;

receiving in said headend a second compressed digitized videophone signal originated at the second electronic address;

at said headend packetizing and processing the second compressed digitized videophone signal based on packetized identification;

transmitting from the headend to the first subscriber terminal the second compressed digitized videophone signal and said compressed digitized television signals corresponding to respective television programs as a first multiplexed packetized cable television signal;

receiving at the first subscriber terminal the second compressed digitized videophone signal and at least a portion of said compressed digitized television signals corresponding to respective television programs over the first transmission medium;

transmitting the second compressed digitized videophone signals from the first subscriber terminal to the first videophone unit over the second transmission medium; and

outputting by the first subscriber terminal to a television at least a portion of television pictures corresponding to the decompressed form of said compressed digitized television signals

~~incoming videophone data from said second videophone unit;~~

~~at said headend packetizing and transmitting said incoming videophone data to said subscriber terminal; and~~

~~receiving and decoding said incoming videophone data in said subscriber terminal.~~

47. (Currently Amended) The method of Claim 46, further comprising the step of:

outputting to the television at least a portion of the decompressed form of the second compressed digitized videophone signal.

~~at said subscriber terminal, transmitting at least a portion of said incoming videophone data to a display device operatively connected to said subscriber terminal for display.~~

Claim 48. Canceled.

49. (Currently Amended) The method of Claim 46, further comprising the steps of:

transmitting from said first videophone unit at least a portion of the decompressed form of the second compressed digitalized videophone signal to a display device operatively connected to said first videophone unit for display . 48, further comprising the steps of:

~~transmitting from said first videophone unit at least a portion of said incoming videophone data to a display device operatively connected to said first videophone unit for display.~~

50. (Currently Amended) The method of Claim 46, wherein headend processing a compressed digitized videophone signal includes identifying an electronic address corresponding to a respective subscriber terminal ~~encoding said outgoing videophone data and decoding said incoming~~

~~videophone data includes identifying an address for said first videophone unit and an address for said second videophone unit.~~

51. (Currently Amended) The method of Claim 50, wherein said electronic addresses are internet protocol addresses.

Claims 52-53. Canceled.

54. (Currently Amended) The method of Claim 46, wherein headend processing a compressed digitalized videophone signal includes assessing a billing charge to the first subscriber terminal further comprising the step of:

~~creating in said headend a billing record corresponding to a duration of the exchange of said incoming videophone data and said outgoing videophone data between said first videophone unit and said subscriber terminal.~~

Claims 55-56. Canceled

57. (Currently Amended) The videophone system of Claim 1, wherein said cable television signal including said compressed digitized videophone signals and said compressed digitized television signals is carried from the headend to said subscriber terminals over the first transmission medium as a multiplexed packetized data stream ~~is a packetized data stream.~~

58. (Currently Amended) The videophone system of Claim 1, wherein said cable television signal further includes analog video signal corresponding to respective television programs and said subscriber terminal are further adapted to receive the analog video signals and provide the at least one viewer with at least a portion of television pictures corresponding to said analog television signals. ~~non-videophone data includes at least one of analog video, analog audio, digital video, digital audio, MPEG formatted data, IP formatted data, control information, and software download information.~~

Claim 59. Canceled.

60. (New) The videophone system of Claim1, wherein said camera provides the video images to the first videophone terminal over a third transmission medium.

61. (New) The videophone system of Claim3, wherein said camera is internal to the first digital videophone.

62. (New) The videophone system of Claim 1, wherein the the first videophone terminal is further adapted to provide a notification of an incoming videophone call associated with the first compressed digitized videophone signal prior to receiving the first compressed digitized videophone signal.

63. (New) The videophone system of Claim 1, wherein the first subscriber terminal is further adapted to receive the first compressed digitized videophone signal only after determining that the first compressed digitized videophone signal is associated with an internet protocol address assigned to the first videophone terminal.

64. (New) The videophone system of Claim 1, wherein the first subscriber terminal is further adapted to receive the first compressed digitized videophone signal only after determining that the first compressed digitized videophone signal is associated with an internet protocol address corresponding to the first subscriber terminal.

65. (New) The videophone system of Claim 1, wherein the second transmission medium providing the connection between the first videophone terminal and the first subscriber terminal comprises a wireless communication channel.